

AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In compliance with the provisions of the Federal Clean Water Act as amended, (33 U.S.C. §§1251 et seq.; the "CWA"), and the Massachusetts Clean Waters Act, as amended, (M.G.L. Chap. 21, §§26-53),

**Sprague Energy**

is authorized to discharge from the facility located at

**Sprague Energy  
728 Southern Artery  
Quincy, MA 02169**

to receiving water named

**Town River Bay (MA74-15)**

in accordance with effluent limitations, monitoring requirements and other conditions set forth herein.

This permit shall become effective on the date of signature.

This permit and the authorization to discharge expire at midnight, five (5) years from the last day of the month preceding the effective date.

This permit supersedes the permit issued on January 23, 2003.

This permit consists of 13 pages in Part I including effluent limitations, monitoring requirements, and state permit conditions and 25 pages in Part II Standard Conditions.

Signed this 18<sup>th</sup> day of May, 2007

/S/ SIGNATURE ON FILE

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Stephen S. Perkins, Director  
Office of Ecosystem Protection  
Environmental Protection Agency  
Boston, MA

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Glenn Haas, Director  
Division of Watershed Management  
Department of Environmental Protection  
Commonwealth of Massachusetts  
Boston, MA

## PART I

## A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

1. During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge **treated storm water** from **outfall 001**. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement <sup>1,2</sup>	
		Average Monthly	Maximum Daily	Measurement Frequency <sup>3</sup>	Sample Type
Flow Rate <sup>4</sup>	gpm	*****	100	When Discharging	Estimate
Total Flow <sup>5</sup>	Mgal/month	Report Monthly Total	*****	When Discharging	Estimate
TSS	mg/l	30	100	1 / Month	Grab
Oil & Grease	mg/l	*****	15	1 / Month	Grab
pH <sup>6</sup>	s.u.	6.5-8.5 range (See Part I.A.4. Page 8)		1 / Month	Grab

See page 4 for explanation of footnotes

## Part I.A.1, Continued

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements <sup>1,2</sup>	
		Average Monthly	Maximum daily	Measurement Frequency <sup>3</sup>	Sample Type
Polynuclear Aromatic Hydrocarbons (PAHs) <sup>7</sup>					
Benzo (a) anthracene	µg/l	-	Report	1/ Quarter	Grab
Benzo(b) fluoranthene	µg/l	-	Report	1/ Quarter	Grab
Benzo(k) fluoranthene	µg/l	-	Report	1/ Quarter	Grab
Chrysene	µg/l	-	Report	1/ Quarter	Grab
Dibenzo (a,h) anthracene	µg/l	-	Report	1/ Quarter	Grab
Indeno (1,2,3-cd) pyrene	µg/l	-	Report	1/ Quarter	Grab
Naphthalene	µg/l	-	Report	1/ Quarter	Grab
Volatile Organic Compounds (VOCs)					
Benzene	µg/l	-	51	1/ Quarter	Grab
Toluene	µg/l	-	Report	1/ Quarter	Grab
Ethylbenzene	µg/l	-	Report	1/ Quarter	Grab
Total Xylenes	µg/l	-	Report	1/ Quarter	Grab

See page 4 for explanation of footnotes

Footnotes:

1. All samples shall be collected from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (i.e., greater than 0.1 inch rainfall) storm event. All samples are to be grab samples taken within thirty (30) minutes of the initiation of the discharge from the outfall(s) where practicable, but in no case later than within the first hour of discharge from the outfall(s). A report stating that there was no discharge shall be submitted when there is no storm event, and subsequently no discharge, during the reporting period.
2. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: after treatment in Oil/Water Separator 1 (OWS 1) but before the effluent is discharged into and/or mixes with the Town River.
3. Sampling frequency of 1/month is defined as the sampling of one (1) event (as defined above in Footnote 1) in each calendar month. Sampling frequency of quarterly is defined as the sampling of one (1) storm event (as defined above in Footnote 1) in each quarter. Quarters are defined as the interval of time between the months of: January through March, inclusive; April through June, inclusive; July through September, inclusive; and October through December, inclusive. **Quarterly sampling shall be performed concurrently with the monthly monitoring event.** The permittee shall submit the results to EPA of any additional testing done in addition to that required herein, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR §122.41(1)(4)(ii).
4. For Flow Rate, the maximum daily value represents the estimated maximum instantaneous flow rate identified by the facility as passing through the Oil/Water (O/W) Separator for each day that storm water is discharged during the reported period. **The facility shall submit a report with the first DMR describing the standard method used to estimate the maximum instantaneous flow rate for OWS 1. This should include any structural or operational controls.**
5. For Total Flow, the value reported represents the estimated sum of each day's storm water volume for each day that storm water is discharged during that month. The total monthly flow rate shall be determined based upon the estimated maximum daily flow rate and the estimated total number of hours that storm water is discharged during the reporting period. Total Flow shall be reported in the units of millions of gallons per month (Mgal/month). The permittee shall also report the total number of days during the reporting period in which there was a discharge from the outfall(s) (to be noted on DMR form under "Event Total" parameter).
6. Required for State Certification.
7. See Part I.A.19

## PART I.A. (continued)

2. During the period beginning the effective date and lasting through the expiration date, the permittee is authorized to discharge **treated storm water** from **outfall 002**. Such discharge shall be limited and monitored by the permittee as specified below:

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirement <sup>1,2</sup>	
		Average Monthly	Maximum Daily	Measurement Frequency <sup>3</sup>	Sample Type
<b>Flow Rate<sup>4</sup></b>	gpm	*****	600	When Discharging	Estimate
<b>Total Flow<sup>5</sup></b>	Mgal/month	Report Monthly Total	*****	When Discharging	Estimate
<b>TSS</b>	mg/l	30	100	1 / Month	Grab
<b>Oil &amp; Grease</b>	mg/l	*****	15	1 / Month	Grab
<b>pH<sup>6</sup></b>	s.u.	6.5-8.5 range (See Part I.A.4. Page 8)		1 / Month	Grab

See page 7 for explanation of footnotes

## Part I.A.2, Continued

Effluent Characteristic	Units	Discharge Limitation		Monitoring Requirements <sup>1,2</sup>	
		Average Monthly	Maximum daily	Measurement Frequency <sup>3</sup>	Sample Type
Polynuclear Aromatic Hydrocarbons (PAHs) <sup>7</sup>					
Benzo (a) anthracene	µg/l	-	Report	1/ Quarter	Grab
Benzo(b) fluoranthene	µg/l	-	Report	1/ Quarter	Grab
Benzo(k) fluoranthene	µg/l	-	Report	1/ Quarter	Grab
Chrysene	µg/l	-	Report	1/ Quarter	Grab
Dibenzo (a,h) anthracene	µg/l	-	Report	1/ Quarter	Grab
Indeno (1,2,3-cd) pyrene	µg/l	-	Report	1/ Quarter	Grab
Naphthalene	µg/l	-	Report	1/ Quarter	Grab
Volatile Organic Compounds (VOCs)					
Benzene	µg/l	-	51	1/ Quarter	Grab
Toluene	µg/l	-	Report	1/ Quarter	Grab
Ethylbenzene	µg/l	-	Report	1/ Quarter	Grab
Total Xylenes	µg/l	-	Report	1/ Quarter	Grab

See page 7 for explanation of footnotes

Footnotes:

1. All samples shall be collected from a storm event that is greater than 0.1 inches in magnitude and that occurs at least 72 hours from the previously measurable (i.e., greater than 0.1 inch rainfall) storm event. All samples are to be grab samples taken within thirty (30) minutes of the initiation of the discharge from the outfall(s) where practicable, but in no case later than within the first hour of discharge from the outfall(s). A report stating that there was no discharge shall be submitted when there is no storm event, and subsequently no discharge, during the reporting period.
2. Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: after treatment in Oil/Water Separator 2 (OWS 2) but before the effluent is discharged into and/or mixes with the Town River.
3. Sampling frequency of 1/month is defined as the sampling of one (1) event (as defined above in Footnote 1) in each calendar month. Sampling frequency of quarterly is defined as the sampling of one (1) storm event (as defined above in Footnote 1) in each quarter. Quarters are defined as the interval of time between the months of: January through March, inclusive; April through June, inclusive; July through September, inclusive; and October through December, inclusive. **Quarterly sampling shall be performed concurrently with the monthly monitoring event.** The permittee shall submit the results to EPA of any additional testing done in addition to that required herein, if it is conducted in accordance with EPA approved methods consistent with the provisions of 40 CFR §122.41(1)(4)(ii).
4. For Flow Rate, the maximum daily value represents the estimated maximum instantaneous flow rate identified by the facility as passing through the Oil/Water (O/W) Separator for each day that storm water is discharged during the reported period. The maximum instantaneous flow rate, which is to be reported in units of gallons per minute (gpm), shall be based upon the summation of the pump curve value(s) for all pumps operating and controlling the rate of flow through the O/W Separator when the discharge is occurring during the reporting period.
5. For Total Flow, the value reported represents the estimated sum of each day's storm water volume for each day that storm water is discharged during that month. The total monthly flow rate shall be calculated based upon the pump curve value(s) and the hours of operation for the pump(s) during the reporting period. Total Flow shall be reported in the units of millions of gallons per month (Mgal/month). The permittee shall also report the total number of days during the reporting period in which there was a discharge from the outfall(s) (to be noted on DMR form under "Event Total" parameter).
6. Required for State Certification.
7. See Part I.A.19

Part I.A (continued)

3. The discharges either individually or in combination shall not cause a violation of State Water Quality Standards of the receiving waters which have been or may be promulgated.
4. The pH of the effluent shall be neither less than 6.5 nor greater than 8.5 at any time, unless these values are exceeded due to natural causes.
5. The discharge shall not cause a visible sheen or an objectionable discoloration of the receiving waters.
6. There shall be no discharge of floating solids or visible foam at any time.
7. The discharges shall not contain materials in concentrations or combinations which are hazardous or toxic to human health, aquatic life of the receiving surface waters or which would impair the uses designated by its classification.
8. There shall be no discharge of tank bottom water and/or bilge water alone or in combination with storm water discharge or other wastewater.
9. The discharge shall not impart color, taste, turbidity, toxicity, radioactivity or other properties which cause those waters to be unsuitable for the designated uses and characteristics ascribed to their use.
10. Notwithstanding specific conditions of this permit, the effluent must not lower the quality of any classified body of water below such classification, or lower the existing quality of any body of water if the existing quality is higher than the classification.
11. There shall be no discharge of hydrostatic test water or extracted groundwater alone or in combination with storm water discharge or other wastewater.
12. The permittee shall inspect, operate, and maintain the Oil/Water Separators at the facility to ensure that the Effluent Limitations and conditions contained in this permit are met. The permittee shall ensure that all components of the facility's Storm Water Pollution Prevention Plan, including those which specifically address the operation and maintenance of the O/W Separators and other components of the storm water conveyance system are complied with.
13. Chemicals (i.e. disinfecting agents, detergents, emulsifiers, etc.), bioremedial agents including microbes shall not be added to the collection and treatment systems without prior approval by the U.S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) to prevent hydrocarbon and/or particulate matter carryover into the Town River.
14. There shall be no discharge of any sludge and/or bottom deposits from any storage tank(s), basin(s), and/or diked area(s) to the receiving waters. Examples of storage tanks and/or basins include, but are not limited to: primary catch basins, O/W Separators, petroleum



product storage tanks, baffled storage tanks collecting spills, and tank truck loading rack sumps.

15. **The permittee shall submit, at the time of the next NPDES permit application, the measures taken to ensure that the maximum design flow of the O/W Separators will not be exceeded.** This should include all methods of estimating or calculating flow rate, all structural and/or operational controls used to restrict the flow of storm water into each O/W Separator, and all structural and/or operational controls used to control the discharge from each O/W Separator.
16. The bypass of storm water runoff, wash water, or water used at the facility is prohibited except where necessary to avoid loss of life, personal injury, or severe property damage. Each bypass shall be sampled for all the effluent characteristics identified in Part I.A.1. and I.A.2. of this permit (i.e. monthly and quarterly) and the results reported to EPA within forty-five (45) days of the initiation of the bypass. These bypass reporting requirements are in addition to those already identified in 40 Code of Federal Regulations (CFR) §122.41(m) and Part II.B.4. of the Standard Conditions of this permit.
17. EPA may modify this permit in accordance with EPA regulations in 40 CFR §122.62 and §122.63 to incorporate more stringent effluent limitations, increase the frequency of analyses, or impose additional sampling and analytical requirements.
18. The appearance of any size sheen attributable to the discharge from the Sprague Energy terminal shall be reported immediately by the permittee to the appropriate U.S. Coast Guard Officer in accordance with Section 311 of the Clean Water Act (CWA). This requirement is in addition to any reporting requirements contained in the National Pollutant Discharge Elimination System (NPDES) permit.
19. The testing of Polynuclear Aromatic Hydrocarbons (PAHs) will be done using EPA method 625 as described in 40 CFR Part 136, Table Ic – PAHs. The reporting of PAHs as described in the effluent limits for Outfall 001 and Outfall 002 will be based on the following Minimum Levels (MLs) of reporting as identified in parentheses for each compound: Benzo (a) anthracene (<5.0 µg/l), Benzo (a) pyrene (<10.0 µg/l), Benzo(b) fluoranthene (<10.0 µg/l), Benzo(k) fluoranthene (<10.0 µg/l), Chrysene (<10.0 µg/l), Dibenzo (a,h) anthracene (<10.0 µg/l), Indeno (1,2,3-cd) pyrene (<10.0 µg/l), and Napthalene (<2.0 µg/l).
20. The permittee shall attach a copy of the laboratory case narrative to the respective Discharge Monitoring Report (DMR) Form submitted to EPA and MassDEP for each sampling event reported. The laboratory case narrative shall include a copy of the laboratory data sheets for each analysis (identifying the test method, the analytical results, and the detection limits for each analyte) and provide a brief discussion of whether all appropriate QA/QC procedures were met and were within acceptable limits.
21. The permittee shall notify the regulatory agency in writing of any changes in the operations, including the use of chemical additives, at the facility that may have an effect on the permitted discharge of wastewater from the facility.

22. All existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Director as soon as they know or have reason to believe (40 CFR §122.42):

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - (i) One hundred micrograms per liter (100 µg/l);
  - (ii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
  - (iii) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
- b. That any activity has occurred or will occur which would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":
  - (i) Five hundred micrograms per liter (500 µg/l);
  - (ii) One milligram per liter (1 mg/l) for antimony;
  - (iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR §122.21(g)(7); or
  - (iv) Any other notification level established by the Director in accordance with 40 CFR §122.44(f) and Massachusetts regulations.
- c. That they have begun or expect to begin to use or manufacture as an intermediate or final product or byproduct any toxic pollutant which was not reported in the permit application.

## 23. Toxics Control

- a. The permittee shall not discharge any pollutant or combination of pollutants in toxic amounts.
- b. Any toxic components of the effluent shall not result in any demonstrable harm to aquatic life or violate any state or federal water quality standard which has been or may be promulgated. Upon promulgation of any such standard, this permit may be revised or amended in accordance with such standards.

## B. STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

1. The permittee shall maintain, update and implement a Storm Water Pollution Prevention Plan (SWPPP) to reduce the discharge of pollutants to the receiving waters identified in this permit. The permittee shall update and amend the SWPPP when necessary to account for any changes affecting the SWPPP including, but not limited to, whenever the following occur: a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants to the waters of the United States; a release of reportable quantities of hazardous substances or oil; or the SWPPP appears to be ineffective in achieving the general objectives of controlling pollutants in storm water discharges associated with industrial activity.
2. An updated and amended SWPPP shall be completed and signed by the Permittee **within 90 days** after the effective date of this Permit. Each amended SWPPP shall be certified by the Permittee. The certification shall be signed in accordance with the requirements identified in 40 CFR §122.22 and a copy of the current certification shall be **sent each year to EPA and MassDEP within thirty (30) days of the annual anniversary of the effective date of the Permit**. The certification should document that the previous year's inspections and maintenance activities were conducted, results were recorded, records were maintained, and that the facility is in compliance with the SWPPP. The permittee shall keep a copy of the most recent SWPPP and certification at the facility and shall make it available for inspection by EPA and MassDEP.
3. The permittee shall assure that the SWPPP is consistent with the requirements outlined in Part 4 of EPA's NPDES Storm Water Multi-Sector General Permit for Industrial Activities, issued by EPA on October 30, 2000 (See 65 FR 64812-64815). The SWPPP shall refer to all of the outfalls, the priority pollutants, the conventional pollutants and the monitoring requirements at each outfall. Additionally, the SWPPP shall include the best management practices (BMPs) appropriate for this specific facility to control storm water discharges from activities that could contribute pollutants to waters of the United States through storm water. Specifically the SWPPP shall contain the elements listed below.
  - a. Pollution Prevention Team
  - b. Site Description
  - c. Receiving Waters and Wetlands
  - d. Summary of Potential Pollutant Sources
  - e. Spills and Leaks
  - f. Sampling Data
  - g. Storm Water Controls

### C. UNAUTHORIZED DISCHARGES

This permit authorizes the permittee to discharge only in accordance with the terms and conditions of this permit and only from outfall listed in Part I A. of this permit. Discharges of wastewater from any other point sources which are not authorized by this permit or other NPDES permits shall be reported in accordance with Part II. D.1.e. (1) of the Standard Conditions of this permit (Twenty-four hour reporting).

### D. MONITORING AND REPORTING

Monitoring results obtained during each calendar month shall be summarized and reported on Discharge Monitoring Report Form(s) postmarked **no later than the 15th day of the following month.**

Signed and dated originals of these, and all other reports required herein, shall be submitted to the Director at the following address:

Environmental Protection Agency  
Water Technical Unit (SEW)  
P.O. Box 8127  
Boston, Massachusetts 02114

In addition, copies of all Discharge Monitoring Report Form(s) and all other reports required by this permit shall also be submitted to the State at following addresses:

Massachusetts Department of Environmental Protection  
Bureau of Waste Prevention  
Northeast Regional Office  
205B Lowell Street  
Wilmington, Massachusetts 01887

Massachusetts Department of Environmental Protection  
Division of Watershed Management  
Surface Water Discharge Permit Program  
627 Main Street, 2<sup>nd</sup> Floor  
Worcester, MA 01608

### E. STATE PERMIT CONDITIONS

This Discharge Permit is issued jointly by the U. S. Environmental Protection Agency (EPA) and the Massachusetts Department of Environmental Protection (MassDEP) under Federal and State law, respectively. As such, all the terms and conditions of this Permit are hereby incorporated into and constitute a discharge permit issued by the Commissioner of the MassDEP pursuant to M.G.L. Chap. 21, §43.

Each Agency shall have the independent right to enforce the terms and conditions of this Permit. Any modification, suspension or revocation of this Permit shall be effective only with respect to the Agency taking such action, and shall not affect the validity or status of this Permit as issued by the other Agency, unless and until each Agency has concurred in writing with such modification, suspension or revocation. In the event any portion of this Permit is declared invalid, illegal or otherwise issued in violation of State law, such permit shall remain in full force and effect under Federal law as an NPDES Permit issued by the U.S. Environmental Protection Agency. In the event this Permit is declared invalid, illegal or otherwise issued in violation of Federal law, this Permit shall remain in full force and effect under State law as a Permit issued by the Commonwealth of Massachusetts.